Harvard T.H. Chan School of Public Health Course Catalog Preview

Biostatistics

Subject: Computational Biol and Quant G

Computational Biol and Quant G 325 Section: 1

CBQG Collaborative Research Thesis (190143)

John Quackenbush

Peter Kraft

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: 1

This course provides students with valuable real-world experience doing research in Boston's premier biomedical institutions. Students are mentored by a member of the program faculty or other affiliated quantitative scientist working in clinical and epidemiological research projects at HSPH, Harvard University, or Harvard-affiliated hospitals.

The Collaborative Research Thesis will normally be undertaken during the fourth (spring) semester, after coursework has been completed. It will be presented in both oral and written form before a committee consisting of the thesis advisor and two additional program faculty. Students with a more extensive background may be permitted to undertake their thesis research during the summer following their second semester, and complete the entire program in as little as 16 months.

Students in the program must complete a 10-20 credit thesis, and so could register for this course possibly 2 to 4 times to achieve the total number of credits. Only students in this program are eligible to register for this course.

Requirements: Course Restricted: Students in the CBQG SM2 program

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Available for Harvard Cross Registration
HSPH: Course Category	Category 2: Required Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt

Computational Biol and Quant G 325 Section: 2

CBQG Collaborative Research Thesis (190143)

John Quackenbush

Peter Kraft

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

This course provides students with valuable real-world experience doing research in Boston's premier biomedical institutions. Students are mentored by a member of the program faculty or other affiliated quantitative scientist working in clinical and epidemiological research projects at HSPH, Harvard University, or Harvard-affiliated hospitals.

The Collaborative Research Thesis will normally be undertaken during the fourth (spring) semester, after coursework has been completed. It will be presented in both oral and written form before a committee consisting of the thesis advisor and two additional program faculty. Students with a more extensive background may be permitted to undertake their thesis research during the summer following their second semester, and complete the entire program in as little as 16 months.

Students in the program must complete a 10-20 credit thesis, and so could register for this course possibly 2 to 4 times to achieve the total number of credits. Only students in this program are eligible to register for this course.

Requirements: Course Restricted: Students in the CBQG SM2 program

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Subject: Biostatistics

Biostatistics 202 Section: 1

Principles of Biostatistics I (190014)

Marcia Testa

2024 Summer (2.5 Credits) Schedule: MTWRF 0800 AM - 0930 AM

Instructor Permissions: None Enrollment Cap: 40

This course is the first part of introductory biostatistics and acquaints the student with the basic concepts and methods of biostatistics, their applications, and their interpretation. The material covered includes data presentation, numerical summary measures, rates and standardization, and life tables. Probability is introduced to quantify uncertainty, especially as it pertains to diagnostic and screening methods. Also covered are sampling distributions so that students may be introduced to confidence intervals and hypothesis testing. The computer is used throughout the course, and the student will gain familiarity with the software package STATA.

BST 202 has a required lab section. Students must enroll in both BST 202 and BST 202LAB in the same term. Failure to enroll in both sections will result in the student being dropped from the single enrolled section

Course Note: Requires a basic knowledge of mathematics and familiarity with use of personal computers.

Course is mutually exclusive with BST 201, 206, 207 and 208, or ID201. You may not take both this course and any of those courses.

Course co-requisite: You must register for both this course and BST203.

Requirements: Students outside of HSPH must request instructor permission to enroll in this course

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 1: School-Wide Core Requirement
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	Summer Session
All: Cross Reg Availability	Not Available for Cross Registration

---

Biostatistics 202LAB Section: 1

Principles of Biostatistics I - Required Lab (212713)

Marcia Testa

2024 Summer (0 Credits) Schedule: MTWRF 0345 PM - 0515 PM

Instructor Permissions: None Enrollment Cap: 25

BST 202LAB is the required lab section for BST 202. Students must enroll in both BST 202 and BST 202LAB in the same term. Failure to enroll in both sections will result in the student being dropped from the single enrolled section.
This course is the first part of introductory biostatistics and acquaints the student with the basic concepts and methods of biostatistics, their applications, and their interpretation. The material covered includes data presentation, numerical summary measures, rates and standardization, and life tables. Probability is introduced to quantify uncertainty, especially as it pertains to diagnostic and screening methods. Also covered are sampling distributions so that students may be introduced to confidence intervals and hypothesis testing. The computer is used throughout the course, and the student will gain familiarity with the software package STATA.

Course Note: Requires a basic knowledge of mathematics and familiarity with use of personal computers.

Course is mutually exclusive with BST 201, 206, 207 and 208, or ID201. You may not take both this course and any of those courses.

Course co-requisite: You must register for both this course and BST203.

Requirements: Course is mutually exclusive with BST201, 206, 207, 208, and ID201. You may not take both this course and any of those courses.
Course co-requisite: You must register for both this course and BST 203.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 1: School-Wide Core Requirement
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Attribute	Value(s)
HSPH: Program Affiliation	Summer Session
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
eForm Autosubmitter	Auto Submitter

Biostatistics 203 Section: 1

Principles of Biostatistics II (190016)

Kerrie Nelson

2024 Summer (2.5 Credits) Schedule: MTWRF 0800 AM - 0930 AM

Instructor Permissions: None Enrollment Cap: 35

BST 202 + 203 must be taken consecutively and students must register for both.

This course is the second part of introductory biostatistics; it continues to explore inference in greater depth. Lectures and laboratory exercises will emphasize applied data analysis, building upon the fundamentals emphasized in BST 202. Topics covered include the comparison of two means, analysis of variance, non-parametric methods, inference on proportions, contingency tables, multiple 2 X 2 tables, correlation, simple regression, multiple regression and logistic regression, analysis of survival data, and sampling theory. The computer is used throughout the course, and the student will gain more familiarity with STATA.
BST 203 has a required lab section. Students must enroll in both BST 203 and BST 203LAB in the same term. Failure to enroll in both sections will result in the student being dropped from the single enrolled section

Course Corequisite(s): BST202

Course is mutually exclusive with BST 201, 206, 207, 208, and ID201. You may not take both this course and any of those courses.

Requirements: Students outside of HSPH must request instructor permission to enroll in this course

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 1: School-Wide Core Requirement
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	Summer Session

Biostatistics 203LAB Section: 1

Principles of Biostatistics II - Required Lab (212718)

Kerrie Nelson

2024 Summer (0 Credits) Schedule: MTWRF 0345 PM - 0515 PM

Instructor Permissions: None Enrollment Cap: 20

BST 203LAB is the required lab section for BST 203. Students must enroll in both BST 203 and BST 203LAB in the same term. Failure to enroll in both sections will result in the student being dropped from the single enrolled section.

BST 202 + 203 must be taken consecutively and students must register for both.
This course is the second part of introductory biostatistics; it continues to explore inference in greater depth. Lectures and laboratory exercises will emphasize applied data analysis, building upon the fundamentals emphasized in BST 202. Topics covered include the comparison of two means, analysis of variance, non-parametric methods, inference on proportions, contingency tables, multiple 2 X 2 tables, correlation, simple regression, multiple regression and logistic regression, analysis of survival data, and sampling theory. The computer is used throughout the course, and the student will gain more familiarity with STATA.

Course Corequisite(s): BST202

Course is mutually exclusive with BST 201, 206, 207, 208, and ID201. You may not take both this course and any of those courses.

Requirements: Course is mutually exclusive with BST201, 206, 207, 208, and ID201. You may not take both this course and any of those courses.
Course co-requisite: You must register for both this course and BST 202.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	Summer Session
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 1: School-Wide Core Requirement

---

Biostatistics 206 Section: 1

Introductory Statistics for Medical Research (190021)

Brian Healy

2024 Summer (2.5 Credits) Schedule: MTWRF 1130 AM - 0100 PM

Instructor Permissions: None Enrollment Cap: 150

This course is reserved for participants in the Program in Clinical Effectiveness only.

Introduces basic biostatistical techniques with an emphasis on applications to clinical research. Topics include probability and statistics, hypothesis testing, confidence intervals, non-parametrics, and power calculations.

Course Restricted: Degree and non-degree Clinical Effectiveness students only

Requirements: Course Restricted: Program in Clinical Effectiveness participants only

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	PCE
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 1: School-Wide Core Requirement

Biostatistics 207 Section: 1

Statistics for Medical Research II (190022)

Brian Healy

2024 Summer (2.5 Credits) Schedule: MTWRF 1130 AM - 0100 PM

Instructor Permissions: None Enrollment Cap: 150

This course is reserved for participants in the Program in Clinical Effectiveness only.

Presents additional biostatistical techniques that commonly appear in the analysis of clinical databases and trials. Topics include contingency table analyses, log-rank tests, paired and matched analyses, analysis of variance and multiple comparisons procedures.

Course Prerequisite(s): BST206

Course Restricted: Degree and non-degree Clinical Effectiveness students only

Requirements: Course Prerequisite(s): BST206
Course Restricted: Program in Clinical Effectiveness participants only

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 1: School-Wide Core Requirement
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	PCE

Biostatistics 209 Section: 1

Machine Learning: Collaborative Data Science in Healthcare (215874)

Leo Anthony Celi

Heather Mattie

Tom Pollard

Chrystinne Fernandes

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: Instructor Enrollment Cap: 36

The first two weeks of this course focus on methods for learning from data in order to gain useful predictions and insights. Through real-world examples of wide interest, we introduce methods for five key facets of an investigation:
1. data wrangling/cleaning in order to construct an informative, manageable data set;
2. software engineering skills for accessing data as well as organizing data analyses and making these analyses sharable and reproducible;
3. exploratory data analysis to generate hypotheses and intuition about the data;
4. inference and prediction based on statistical tools with a focus on machine learning;
5. communication of results through visualization, stories, and interpretable summaries.
During the last week of the course, with the help of the instructors and TAs, student teams will choose a

clinically relevant question and complete a group project that includes parsing the question into a study design and methodology for data analysis and interpretation, with an emphasis on the data curation that is required before any analysis can be performed. The Medical Information Mart for Intensive Care (MIMIC) database and the eICU Collaborative Research Database will be used for each project. Students are expected to be familiar with R and RStudio before enrolling in this course.

Students are expected to have R and RStudio installed on their laptops and to be familiar with programming in R. The instructors highly recommend completing an online introduction to R course (via edX, Coursera, Data Camp, Udacity, etc.) before enrolling in this course if the student hasn't been exposed to R. A brief review of programming in R will take place during the first session.

Class Notes: THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | PCE Students, MPH-CLE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing
Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM
Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: BST 209 is open to PCE students currently taking BST206 and also to PCE students who took BST 206, BST 207, or BST 208 in previous years. It is also open to other students who have similar previous training.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 4: Elective
HSPH: Program Affiliation	PCE

Biostatistics 215 Section: 1

Linear and Longitudinal Regression (190112)

Garrett Fitzmaurice

2024 Summer (2.5 Credits) Schedule: MTWRF 0345 PM - 0515 PM

Instructor Permissions: None Enrollment Cap: 50

This course is intended for students who are already very comfortable with fundamental techniques in statistics. The course will cover methods for building and interpreting linear regression models, including statistical assumptions and diagnostics, estimation and testing, and model building techniques. These models will be extended to handle data arising from longitudinal studies employing repeated measurement of subjects over time. Lectures will be accompanied by computing exercises using the Stata statistical package.
When offered in Summer: Restricted to HSPH degree or PCE students. Due to overlapping content, students may not enroll in this course after taking BST 226 in the spring without instructor permission.
When offered during the Academic Year: Students enrolled in the MPH-EPI program have priority enrollment in this course. MPH-GEN students will be automatically added to the waitlist. All other students must request instructor permission with priority of permission granted to students in a summer-only/summer focused program. Students will be enrolled into the course (if space available) according to the following waves:

Wave 1: 1/4/2024 - 1/14/2024 - MPH-EPI
Wave 2: 1/15/2024 - 1/17/2024 - MPH-GEN and all other students with approved petitions

Class Notes:

THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | PCE Students, MPH-CLE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing
Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM
Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements:

Course Prerequisites: EPI522 or BST201 or ID201 or ID207 or BST202&203 or BST206&207 or BST206&208.
Restriction: MPH-EPI students have priority enrollment. MPH-GEN will be automatically added to the waitlist. Others must request instructor permission

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 3: Essential Course
HSPH: SUM Limited Enrollment	HSPH: YES
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	PCE

Biostatistics 224 Section: 1

Survival Methods in Clinical Research (190041)

Long Ngo

2024 Summer (2.5 Credits)		Schedule:	MTWRF 1130 AM - 0100 PM
Instructor Permissions:	None	Enrollment Cap:	52

This course will cover the common approaches to the display and analysis of survival data, including Kaplan-Meier curves, log rank tests, and Cox proportional hazards regression. Computing, using SAS, will be an integral component of the course.

Class Notes: THIS CLASS HAS PRIORITY ENROLLMENT

Priority Wave Groups

Wave 1 | PCE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing

Wave 1 | 5/18/2023 11:00AM – 5/28/2023 11:59PM
Wave 2 | 5/29/2023 12:00AM – 5/31/2023 11:59PM
Wave 3 | 6/1/2023 12:00AM – Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: Course Prerequisite(s): BST210, 213, 215 or EPI236. Concurrent enrollment permitted for EPI 236.
Course Restricted: HSPH Degree or PCE students. All other students can request instructor permission.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	PCE
HSPH: Course Category	Category 3: Essential Course
HSPH: SUM Limited Enrollment	HSPH: YES
All: Cross Reg Availability	Not Available for Cross Registration

Biostatistics 225 Section: 1

Introduction to Systematic Reviews and Meta-Analysis Methods (190051)

Michael Stoto

2024 Summer (2.5 Credits)		Schedule:	MTWRF 0345 PM - 0515 PM
Instructor Permissions:	None	Enrollment Cap:	28

Introduction to systematic reviews and meta-analysis methods are used in public health and clinical medicine. Students learn how to use a variety of formal and informal methods for identifying, evaluation, and synthesizing information from randomized controlled trials and observational studies, assessing the strength of the evidence, and translating the results into policy and practice guidelines. Concepts are introduced and illustrated through case studies of public health or clinical topic of their choosing. Intermediate results will be presented and discussed in class.
Requires strong quantitative skills as well as knowledge of the design, analysis, evaluation, and interpretation of randomized clinical trials and observational/epidemiological studies. MPH-level courses in biostatistics and epidemiology are a pre-requisite or a co-requisite. Priority for enrollment will be given to students in the Program for Clinical Effectiveness (PCE). Non-degree students must provide evidence of the necessary knowledge and ability (e.g. grades in quantitative courses taken, test scores).
Course is mutually exclusive with EPl233. You may not take both this course and EPl233.

Class Notes: Priority for enrollment will be given to students in the Program for Clinical Effectiveness (PCE). Non-degree students must provide evidence of the necessary knowledge and ability (e.g. grades in quantitative courses taken, test scores) and may request instructor permission.

THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | PCE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing
Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM
Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)
Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: [BST 201 or (BST 202 (concurrent) and BST 203) or (BST 206 and BST 207/8 (concurrent))] and [EPI 200 or EPI 201 or EPI 208 (concurrent) or EPI 500] or ID 201 or ID 207. Mutually exclusive with EPI 233.

Restricted to HSPH Degree or PCE students.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 3: Essential Course

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	Summer Session
HSPH: SUM Limited Enrollment	HSPH: YES

Biostatistics 300

Independent Study (190099)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These studies are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective

Biostatistics 300 Section: 002

Independent Study (190099)

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These studies are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH

enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration

Biostatistics 300 Section: 003

Independent Study (190099)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These studies are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration

Biostatistics 300 Section: 004

Independent Study (190099)

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These studies are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form,

which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300

Biostatistics 305

Independent Study - CPT (220776)

Brent Coull

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These studies are open to all students who wish to go beyond the content of regular courses.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Available for Harvard Cross Registration

Biostatistics 305 Section: 002

Independent Study - CPT (220776)

Brent Coull

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These studies are open to all students who wish to go beyond the content of regular courses.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Available for Harvard Cross Registration

Biostatistics 311 Section: 1

Teaching Assistant (190102)

Brent Coull

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

Work with members of the department in laboratory instruction and the development of teaching materials.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Available for Harvard Cross Registration
Course Evaluation	Course Evaluation Exempt

Biostatistics 325 Section: 1

Biostatistics Master's Thesis (190108)

Erin Lake

Jeffrey Miller

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: 1

Limited to students in the Biostatistics SM60 program, this ordinally graded thesis will include data analyses, data interpretation, and comparison of alternative methods, and will culminate in the student's written Master's thesis and oral presentation.

Requirements: Course Restriction: Restricted to students in the SM60-BIO Program

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Available for Harvard Cross Registration
HSPH: Course Category	Category 2: Required Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt

Biostatistics 325 Section: 2

Biostatistics Master's Thesis (190108)

Erin Lake

Jeffrey Miller

2024 Summer (0 Credits)		Schedule:	TBD
Instructor Permissions:	Instructor	Enrollment Cap:	1

Limited to students in the Biostatistics SM60 program, this ordinally graded thesis will include data analyses, data interpretation, and comparison of alternative methods, and will culminate in the student's written Master's thesis and oral presentation.

Requirements: Course Restriction: Restricted to students in the SM60-BIO Program

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Available for Harvard Cross Registration

Doctor of Public Health

Subject: Doctor of Public Health

Doctor of Public Health 201 Section: 1

Fundamental Concepts of Public Health (203339)

Jennifer Goldsmith

2024 Summer (2.5 Credits)		Schedule:	MW 0800 AM - 0100 PM W 0800 AM - 0100 PM
Instructor Permissions:	None	Enrollment Cap:	10

This course is intended to equip the student with an understanding of the foundational concepts that will help to organize thinking and learning throughout the DrPH Program. DRPH 201 is designed to explore the intersection between fundamentals of public health, the complex factors that redefine public health and its integration with other global policy factors, and how as leaders, theory and practice lead to integrated multi-sectoral approaches to addressing public health challenges.

DrPH students bring prior experience to the academic study of public health, yet a wide range of backgrounds in terms of disciplinary training, approaches, and experience. This course is intended, in part, to develop with students a common language and a set of conceptual frameworks to guide learning throughout the program. Teaching methods in this intensive course will include thought papers, group exercises, interactive lectures, scholarly readings, and class discussion.

Course Restricted: DrPH students only.

Requirements: Class restricted to new DRPH students

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 240 Section: 1

Leadership in Public Health: Personal Mastery (203340)

Fawn Phelps

Perry Dougherty

2024 Summer (2.5 Credits) Schedule: TWR 0900 AM - 0400 PM

Instructor Permissions: None Enrollment Cap: 15

The landscape of public health is deeply complex and rapidly changing. Public health leaders understand systemic problems, set new directions, lead change and learn quickly from mistakes. Public health leaders connect with and inspire others to join them in addressing the most intractable population health challenges. The transformational public health leader develops this capacity through an ongoing cycle of study, introspection and application.

Leadership development often requires the expansion or altering of a person's perception of self and of others. A person can change how they view themselves and how they view and engage with others through intensive personal and group experiences with time for reflection and learning. In this foundation course, you will:

1. Develop a greater understanding of yourself as a leader and a learner, including your strengths and challenges.
2. Grow your ability to understand, engage, and effectively support and challenge others; and,
3. Deepen your understanding and application of dialogue to build community.

Course Note: Course is restricted to DrPH students in the 1st year.

Requirements: Course restricted to 1st year DRPH students

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course

Doctor of Public Health 260 Section: 1

Effective Writing for Policy Leadership (205559)

Gregory Harris

2024 Summer (1.25 Credits) Schedule: TRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 10

This course in effective writing focuses on the strategies and techniques behind great persuasive writing in policy leadership. Every element of the writing process will be explored and addressed, with special attention paid to the key genres you will face as a writer in the public, discursive world of memos, editorials, and social media. Weekly writing assignments, along with focused exercises and peer review, will hone skills and provide ample opportunity for feedback.

Requirements: Course restricted to new DRPH students

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter

Doctor of Public Health 261 Section: 1

Art of Communication - Public Speaking (207833)

Jack Rossin

2024 Summer (1.25 Credits) Schedule: TR 1130 AM - 0100 PM

Instructor Permissions: None Enrollment Cap: 10

Art of Communications - Develop the presentation skills necessary for professional success. Emphasis is placed on the skills most critical to managers and their responsibilities as communicators.

Requirements: Limited to DrPH students

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
eForm Autosubmitter	Auto Submitter
HSPH: Conditionally Approved	Conditionally Approved Course
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 301 Section: 1

Independent Study (205548)

Richard Siegrist

2024 Summer (0.25 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt

Doctor of Public Health 305 Section: 1

Field Immersion (203336)

Gillian Christie

Jennifer Goldsmith

2024 Summer (10 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

It is offered for 10 credits in the Summer Session.

Requirements: DrPH enrollment only

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course

Doctor of Public Health 350 Section: 1

Doctoral Project (Residence) (203349)

Richard Siegrist

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Doctor of Public Health 350 Section: 2

Doctoral Project (Residence) (203349)

Nancy Turnbull

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course

Doctor of Public Health 350 Section: 3

Doctoral Project (Residence) (203349)

Kevin Croke

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 350 Section: 4

Doctoral Project (Residence) (203349)

Mary Bassett

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for

completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 350 Section: 7

Doctoral Project (Residence) (203349)

Vaughan Rees

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Doctor of Public Health 350 Section: 8

Doctoral Project (Residence) (203349)

Howard Koh

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course

Doctor of Public Health 400 Section: 1

Doctoral Project (Non-Resident) (203350)

Richard Siegrist

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
HSPH: Indpt. Study / Research	YES
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 400 Section: 2

Doctoral Project (Non-Resident) (203350)

Nancy Turnbull

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 400 Section: 3

Doctoral Project (Non-Resident) (203350)

Kevin Croke

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Doctor of Public Health 400 Section: 4

Doctoral Project (Non-Resident) (203350)

Mary Bassett

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Doctor of Public Health 400 Section: 7

Doctoral Project (Non-Resident) (203350)

Vaughan Rees

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 2: Required Course
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration

Doctor of Public Health 400 Section: 8

Doctoral Project (Non-Resident) (203350)

Howard Koh

2024 Summer (15 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

These two credit bearing courses, are the primary vehicle for which DRPH students will earn credits for completing their Doctoral Projects. Students will be expected to register for 15 credits of DRPH 350 OR DRPH 400 during the summer and 20 credits during the Fall and Spring to maintain their full-time student status at the School. Students will be expected to register for a section of DRPH 350 OR DRPH 400 that corresponds to their resident status (resident versus non-resident) and their committee chair/advisor.

Requirements: HSPH: Passed DRPH Oral Exam

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Environmental Health

Subject: Environmental Health

Environmental Health 300

Independent Study (190217)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Opportunities are provided for independent studies in the fields of aerosol technology, air pollution control, environmental health management, environmental epidemiology, environmental microbiology, industrial hygiene and ventilation, nuclear medicine, occupational medicine, radiological health, respiratory biology, respiratory epidemiology, injury epidemiology, ergonomics, and solid waste management.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 3: Essential Course
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300

Environmental Health 300 Section: 002

Independent Study (190217)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Opportunities are provided for independent studies in the fields of aerosol technology, air pollution control, environmental health management, environmental epidemiology, environmental microbiology, industrial hygiene and ventilation, nuclear medicine, occupational medicine, radiological health, respiratory biology, respiratory epidemiology, injury epidemiology, ergonomics, and solid waste

management.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 3: Essential Course
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Environmental Health 300 Section: 003

Independent Study (190217)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Opportunities are provided for independent studies in the fields of aerosol technology, air pollution control, environmental health management, environmental epidemiology, environmental microbiology, industrial hygiene and ventilation, nuclear medicine, occupational medicine, radiological health, respiratory biology, respiratory epidemiology, injury epidemiology, ergonomics, and solid waste management.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 3: Essential Course

Environmental Health 300 Section: 004

Independent Study (190217)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Opportunities are provided for independent studies in the fields of aerosol technology, air pollution control, environmental health management, environmental epidemiology, environmental microbiology, industrial hygiene and ventilation, nuclear medicine, occupational medicine, radiological health, respiratory biology, respiratory epidemiology, injury epidemiology, ergonomics, and solid waste management.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Independent Study	HSPH Independent Study 300
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 3: Essential Course
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Epidemiology

Subject: Interdepartmental

Interdepartmental 207 Section: 1

Intro to Epidemiol. & Biostat. (190743)

Pamela Rist

Brian Healy

2024 Summer (7.5 Credits) Schedule: MTWRF 0830 AM - 0500 PM

Instructor Permissions: None Enrollment Cap: 65

At the conclusion of this course, students will have gained a solid understanding of basic principles and methods of epidemiology and biostatistics; learned how to apply these principles and methods to the

evaluation of relevant public health questions; and developed the ability to critically analyze the epidemiologic and public health literature. Methods of instruction will include lectures, videos, seminars, exercises, and a group project. This is part of a 10 credit intensive course, and has two components: 3-weeks on campus in June, and a 6-week online component in July and August. Both ID207 and ID 208 are required to fulfill this course.

Course Restricted: MPH-EPI students only

Requirements: Course Restricted: MPH EPI students only

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course
HSPH: Program Affiliation	MPH-EPI
eForm Autosubmitter	Auto Submitter

Interdepartmental 208 Section: 1

Intro to Epidemiol. & Biostat. (190744)

Pamela Rist

Brian Healy

2024 Summer (2.5 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 65

At the conclusion of this course, students will have gained a solid understanding of basic principles and methods of epidemiology and biostatistics; learned how to apply these principles and methods to the evaluation of relevant public health questions; and developed the ability to critically analyze the epidemiologic and public health literature. Methods of instruction will include lectures, videos, seminars, exercises, and a group project. This is part of a 10 credit intensive course, and has two components: 3-weeks on campus in June, and a 6-week online component in July and August. Both ID207 and ID 208 are required to fulfill this course.

Course Restricted: MPH-EPI students only

Requirements: Course Restricted: MPH EPI students only

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course
HSPH: Program Affiliation	MPH-EPI
eForm Autosubmitter	Auto Submitter

Subject: Epidemiology

Epidemiology 202S Section: 1

Epidemiologic Methods 2: Elements of Epidemiologic Research (Summer) (207562)

Murray Mittleman

2024 Summer (2.5 Credits) Schedule: MTWRF 0945 AM - 1115 AM

Instructor Permissions: None Enrollment Cap: 64

EPI 202 extends the concepts of study design, data analysis and causal inference in the introductory epidemiology courses. Principles and methods are illustrated with examples, and reviewed through homework and in-class exercises. May serve as an introduction to more advanced study or as a concluding course for those desiring a working knowledge of epidemiologic methods. This course is designed primarily for those interested in a research career requiring a rigorous foundation in the design, conduct and analysis of epidemiologic studies. An optional lab session is held daily from 1:00-1:50pm.

Course Prerequisites: (EPI201 or EPI500 or EPI208 or ID201 or ID207) AND (BST201 or BST202&203 or BST206&207/8 or ID201 or ID207 or PHS2000) (all courses may be taken concurrently)

Requirements: (EPI201 or EPI500 or EPI208 or ID201 or ID207) AND (BST201 or ID201 or ID207 or BST202&203 or BST206&207/8 or PHS2000) (all courses may be taken concurrently)

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course
HSPH: Program Affiliation	Summer Session
All: Cross Reg Availability	Not Available for Cross Registration

Epidemiology 208 Section: 1

Introduction to Clinical Epidemiology (190275)

Heather Baer

Earl Cook

Jeffrey Schnipper

Daniel Singer

2024 Summer (5 Credits) Schedule: MTWRF 0945 AM - 1115 AM
MTWRF 0800 AM - 0930 AM

Instructor Permissions: None Enrollment Cap: 175

Course Description
This is an introductory-level course that covers the principles and methods used in traditional and clinical epidemiologic research studies, through a series of lectures, exercises, seminars, workshops, and presentations. The course is aimed at individuals who are planning to conduct clinical or health services research. During the course, students develop their own proposal for a research study. The regular daily timeslot is 8:00-9:30 am, but some days the course will also use the 9:45-11:15 am timeslot, which is shared with the BST courses during the Program in Clinical Effectiveness.

Course Activities: Lectures, workshops, presentations, seminar discussions, problem sets, written assignments, computer exercise. During the course, each student is required to develop a study proposal that addresses a specific clinical problem and to formally present this proposal to the class. These proposals

are then written in grant application format and submitted as the final paper for the course. Students should be sure to have 2-3 ideas for the proposal before the course starts. Workshops, presentations, and seminar discussions are held during scheduled class time. There are optional office hours outside of class time.

Course is mutually exclusive with EPI201, EPI500, EPI505, ID201, and ID538. You may not take both this course and any of those courses.

Course Restricted: Degree and non-degree Clinical Effectiveness students only

Enrollment Requirements: Course is mutually exclusive with EPI201, EPI500, EPI505, ID201, and ID538. You may not take both this course and any of those courses. Course Restricted: Program in Clinical Effectiveness participants only

Class Notes: Enrollment Requirements:
- Course is mutually exclusive with EPI201, EPI500, EPI505, ID201, and ID538. You may not take both this course and any of those courses.
- Course Restricted: Program in Clinical Effectiveness participants only (or instructor permission)

Requirements: Course is mutually exclusive with EPI201, EPI500, EPI505, ID201, and ID538. You may not take both this course and any of those courses.

Course Restricted: Program in Clinical Effectiveness participants only (or instructor permission)

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	PCE
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course

Epidemiology 236 Section: 1

Analytical Clinical Epi (190302)

Andrea Bellavia

2024 Summer (5 Credits) Schedule: MTWRF 0800 AM - 0930 AM
MTWRF 0945 AM - 1115 AM

Instructor Permissions: None Enrollment Cap: 65

Course Description: This course will cover regression-based methods used in clinical epidemiology to control for confounding, including logistic regression and propensity scores, extensions of logistic regression (ordinal logistic regression, multinomial logistic regression, and conditional logistic regression), and methods for developing and validating prediction rules based on regression models and some common Machine Learning alternatives (tree-based methods and neural networks). Lecture will demonstrate these methods

primarily showing R output, but weekly computer workshops run by Teaching Fellows will demonstrate how to perform these analyses using SAS, Stata, and R. Students can use any computer software packages to complete course assignments.

Course Objectives: Upon successful completion of this course, students should be able to: • Identify and apply appropriate analytic methods to examine the effect of a risk factor on an outcome. • Detect and control for confounding. • Detect and describe the presence of effect modification. • Develop and validate a clinical prediction rule using Regression Models or selected Machine Learning methods. • Implement analyses using Stata, SAS, or R

Pre-Requisites Introductory Courses in Epidemiology (EPI208, EPI201, EPI500) and in Biostatistics (BST206, BST201), or permission of the instructor

Class Notes:	Restricted to: Summer only MPH-CLE Summer only MPH-QM Summer only SM1-EPI Academic year MPH-CLE Academic year SM1-EPI All other students can request instructor permission. THIS CLASS HAS PRIORITY ENROLLMENT Priority Wave Groups Wave 1 | PCE Students Wave 2 | Approved Petitioners Wave 3 | Approved Petitioners --- Priority Wave Timing Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session) Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)
Requirements:	Prerequisties: (EPI 200 or EPI201 or EPI208 or EPI500 or ID 207) AND (BST201 or BST202&203 or BST206&207 or BST206&208 or ID 207) Restricted: Summer only MPH-CLE, MPH-QM, SM1-EPI Academic year MPH-CLE, SM1-EPI Other students can request permission.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: SUM Limited Enrollment	HSPH: YES
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course
HSPH: Program Affiliation	PCE

Epidemiology 253 Section: 1

Effectiveness Research with Longitudinal Healthcare Databases (190316)

Rishi Desai

Benjamin Rome

Yanmin Zhu

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 70

Large longitudinal healthcare databases have become important tools for studying the utilization patterns and clinical effectiveness of medical products and interventions in a wide variety of care settings and for evaluating the impact of clinical programs or policy changes. This course will prepare students to identify and use longitudinal databases in their own research. Strengths and limitations of large longitudinal healthcare databases that are commonly used for effectiveness research will be considered. Special attention will be devoted to nationally representative databases and local electronic medical record data sources that are readily available to new investigators.

The centerpiece of the course is a student project which includes conducting a pilot feasibility analysis and developing a study protocol. Students will work with a large longitudinal insurance claims database and with easy-to-use statistical software to develop inclusion and exclusion criteria, produce population descriptive, and implement follow-up models and risk adjustment methodologies resulting in multivariable adjusted effect estimates. Practical issues in obtaining, linking, and analyzing large databases will be emphasized throughout the course, and key analytic issues will be addressed, including design considerations and multivariable risk-adjustment.

The course does not require specific programming skills. It is focused on analytic principles and their application to database research rather than mathematical details. It requires an understanding of epidemiologic study designs and typical analysis strategies.

Class Notes: THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | PCE Students
Wave 2 | Approved Petitioners
Wave 3 | Approved Petitioners

Priority Wave Timing
Wave 1 | 5/16/2024 12:00AM - 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM

Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: Prerequisites: ID201 or ID207 or [(BST201/202&3/206&7/8) and (EPI200/201/208/500/505)]. Concurrent enrollment is permitted.
Course Restricted: HSPH degree or PCE students. All other students can request instructor permission.

Additional Course Attributes:

Attribute	Value(s)
HSPH: SUM Limited Enrollment	HSPH: YES
HSPH: Course Category	Category 3: Essential Course
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	PCE

Epidemiology 271 Section: 1

Propensity Score Analysis: Theoretical & Practical Considerations (190324)

Tobias Kurth

2024 Summer (1.25 Credits) Schedule: TWRF 0100 PM - 0400 PM

Instructor Permissions: None Enrollment Cap: 64

This course introduces basic and advanced theory underlying propensity score analyses and provides practical insights into the conduct of studies employing the method. Course readings will include propensity score theory as well as applications. Lectures are complemented by computer lab sessions devoted to the mechanics of estimating and using the propensity score as a tool to control for confounding in observational research. Students should have knowledge in multivariable modeling approaches. A course project will involve the application of propensity scores to a data set or the review of a related, published paper.

Course Activities: Lectures, readings, homeworks, computer labs, participation, project.
Course Prerequisite(s): EPI204 or EPI236 or BST210 or BST213; may not be taken concurrently.

Class Notes: This is an on-campus course and only available to students enrolled in the MPH-EPI program.

Requirements: Prerequisite: EPI 522; may not be taken concurrently.
Students eligible to enroll must be in the MPH EPI program.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration

Epidemiology 300

Independent Study (190341)

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300
HSPH: Course Category	Category 4: Elective

Epidemiology 300 Section: 002

Independent Study (190341)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH

enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration

Epidemiology 300 Section: 003

Independent Study (190341)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300

Epidemiology 300 Section: 004

Independent Study (190341)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form,

which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective

Epidemiology 315 Section: 1

Research: Clinical Epidemiology (190345)

Pamela Rist

2024 Summer (1.25 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

All students who intend to complete the requirements for a Master of Science in Epidemiology based on only a summer schedule, are required to undertake and complete a clinical research project at their institution under the supervision of a local mentor and a member of the Harvard faculty. Five to 12.5 tutorial credits will be granted for this research. Each student is required to submit a written paper summarizing his or her research project. The exact content of this research project is determined by the faculty member assigned as principal advisor to the student. An appropriate content for this project might include the development of a research proposal to address a clinical question of interest, the implementation of this proposal with the collection of patient data, the analysis of these data, and the creation of a publishable manuscript (with detailed appendices) to describe the results of the analysis. Alternatively, part of this project might pertain to the creation of a full-fledged RO1 study protocol in the National Institutes of Health format, a publishable paper based on the analysis of existing data, a decision analysis, or a cost-effectiveness analysis.

Course Activities: Supervised research. Written progress reports must be submitted each semester.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration

Epidemiology 315 Section: 2

Research: Clinical Epidemiology (190345)

Pamela Rist

2024 Summer (1.25 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

All students who intend to complete the requirements for a Master of Science in Epidemiology based on only a summer schedule, are required to undertake and complete a clinical research project at their institution under the supervision of a local mentor and a member of the Harvard faculty. Five to 12.5 tutorial credits will be granted for this research. Each student is required to submit a written paper summarizing his or her research project. The exact content of this research project is determined by the faculty member assigned as principal advisor to the student. An appropriate content for this project might include the development of a research proposal to address a clinical question of interest, the implementation of this proposal with the collection of patient data, the analysis of these data, and the creation of a publishable manuscript (with detailed appendices) to describe the results of the analysis. Alternatively, part of this project might pertain to the creation of a full-fledged RO1 study protocol in the National Institutes of Health format, a publishable paper based on the analysis of existing data, a decision analysis, or a cost-effectiveness analysis.

Course Activities: Supervised research. Written progress reports must be submitted each semester.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Epidemiology 315 Section: 3

Research: Clinical Epidemiology (190345)

Pamela Rist

2024 Summer (1.25 Credits) Schedule: TBD

Instructor Permissions: Instructor Enrollment Cap: n/a

All students who intend to complete the requirements for a Master of Science in Epidemiology based on only a summer schedule, are required to undertake and complete a clinical research project at their institution under the supervision of a local mentor and a member of the Harvard faculty. Five to 12.5 tutorial credits will be granted for this research. Each student is required to submit a written paper summarizing his or her research project. The exact content of this research project is determined by the faculty member assigned as principal advisor to the student. An appropriate content for this project might include the development of a research proposal to address a clinical question of interest, the implementation of this proposal with the collection of patient data, the analysis of these data, and the creation of a publishable manuscript (with detailed appendices) to describe the results of the analysis. Alternatively, part of this project might pertain to the creation of a full-fledged RO1 study protocol in the National Institutes of Health format, a publishable paper based on the analysis of existing data, a decision analysis, or a cost-effectiveness analysis.

Course Activities: Supervised research. Written progress reports must be submitted each semester.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Epidemiology 500 Section: 1

Fundamentals of Epidemiology (190351)

Albert Hofman

2024 Summer (2.5 Credits) Schedule: MTWRF 0945 AM - 1115 AM

Instructor Permissions: None Enrollment Cap: 77

This course will provide an orientation to epidemiology as a basic science for public health and clinical medicine. It will address the principles of the quantitative approach to clinical and public health problems. The course will discuss measures of frequency and association, introduce the design and validity of epidemiologic research, and give an overview of data analysis. This course is an introduction to the skills needed by public health professionals and clinicians to interpret critically the epidemiologic literature. It will provide students with the principles and practical experience needed to initiate the development of these skills. Lectures are complemented by weekly 2-hour seminars held on Thursday or Friday, and devoted to case studies, exercises, or critique of current examples of epidemiologic studies.
Course is mutually exclusive with EPI200, EPI201, EPI208, EPI505, ID200, and ID538. You may not take both this course and any of those courses.

Requirements: Course is mutually exclusive with EPI200, EPI201, EPI208, EPI505, ID200, and ID538. You may not take both this course and any of the listed course.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	Summer Session
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course

Epidemiology 947U Section: 1

Applied Practice and Integrative Learning Experience for Clinical Effectiveness (211102)

Heather Baer

2024 Summer (2.5 Credits) Schedule: MTWRF 0100 PM - 0150 PM

Instructor Permissions: Instructor Enrollment Cap: 40

This course fulfills the Applied Practice Experience (APE, or "practicum") and Integrative Learning Experience (ILE) requirements for Summer-focused MPH in Clinical Effectiveness (MPH CLE) students. For the practicum, all students develop and conduct an applied analytic project that includes aspects of epidemiology, biostatistics, decision sciences, or other quantitative aspects of public health. The project must have an analytic component (i.e., it cannot be a purely descriptive project.) Each student works with a local mentor (at

their host organization or home institution) as well as a Harvard faculty mentor. The practicum culminates in a final presentation about their project in EPI 947U, an on-campus seminar that students must attend during their second or third summer of the program.

All Summer-focused MPH CLE students must register for two semesters of EPI 947 in their final year of the program: EPI 947S (Full Spring) and EPI 947U (Full Summer), which are 2.5 credits each (5.0 credits total). There are no class meetings of EPI 947S during the Spring, but students will work independently on their projects (with guidance from their local and Harvard mentors) and submit several assignments, including a Learning Agreement and Analysis Plan. During the Summer, students will register for and attend EPI 947U, an on-campus daily seminar (from 1-1:50 pm ET) in which they will present the methods and results from their practicum projects, write two critiques of other students' presentations, and submit their final Integrative Learning Experience paper. Attendance at the EPI 947U seminars during the second or third summer is mandatory.

Before registering for EPI 947, students must submit the CLE Practice Course Application (https://hsph.me/CLE-PracticeCourseApplication). Students must request permission to register for EPI 947 in my.harvard, and Dr. Baer will approve this request after reviewing the CLE Practice Course Application. If students do not know what project they are working on for the practicum, they should contact Dr. Baer directly before registering for EPI 947 (hbaer@bwh.harvard.edu).

More detailed information about the practicum can be found at this site: https://www.hsph.harvard.edu/public-health-practice-resources/for-students/mph-practicum-information/mph-practicum/clinical-effectiveness-practicum/

Course Note: Student must attend the on-campus sessions of this course during their second or third summer, to present their own practicum projects and hear other students' presentations. Regular contact between students and mentors is expected during the year to seek advice, provide activity updates, and to discuss approaches to the solution of methodological issues.

Enrollment Requirements:
Course Restricted to students in the MPH summer-focused CLE program. Students must have completed the CLE Practice Course Application (https://hsph.me/CLE-PracticeCourseApplication) before registering.

Requirements: Course Restricted to students in the MPH summer focused CLE program.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course

Global Health and Population

Subject: Global Health & Population

Global Health & Population 213 Section: 1

Global Cardiovascular Disease Prevention - what do we know and how do we know it (204772)

Goodarz Danaei

2024 Summer (2.5 Credits) Schedule: MTWRF 0800 AM - 0930 AM

Instructor Permissions: None Enrollment Cap: 30

This course is comprised of three modules. During the first week, we review the current evidence on cardiovascular disease prevention by focusing on environmental, nutritional, psychosocial and physiological risk factors. The second week focuses on methods and study designs including observational studies (cross-sectional, cohort and case-control) and randomized trials. In the final week, we cover risk prediction models, cost-effectiveness modeling and intervention/policy analysis. At the end of the course, the students will be able to critically evaluate the evidence on CVD prevention in global populations.

Course Note: Limit to 30 students, Lown Scholars will enroll.

Class Notes: Limit to 30 students, Lown Scholars will enroll.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Available for Harvard Cross Registration
HSPH: Program Affiliation	Summer Session

Global Health & Population 300

Independent Study (190419)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: 300

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. The program provides an opportunity to consider the design of studies, programs, or analysis of data.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Global Health & Population 300 Section: 002

Independent Study (190419)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. The program provides an opportunity to consider the design of studies, programs, or analysis of data.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt

Global Health & Population 300 Section: 003

Independent Study (190419)

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. The program provides an opportunity to consider the design of studies, programs, or analysis of data.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Global Health & Population 300 Section: 004

Independent Study (190419)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. The program provides an opportunity to consider the design of studies, programs, or analysis of data.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration

Global Health & Population 505

Epidemiologic Methods for Global Health (203320)

Courtney Yuen

2024 Summer (2.5 Credits) Schedule: MTWRF 0800 AM - 0930 AM

Instructor Permissions: None Enrollment Cap: 40

This is an applied epidemiology course whose goal is to enable global health practitioners to collect and use quantitative data to guide programmatic decisions. It is taught at an introductory level and designed to be accessible to learners without prior public health or advanced mathematics coursework. However, it is intended for learners with some prior experience working in health-related programs. While covering basic

concepts common to all branches of epidemiology, its focus on the pragmatic considerations of collecting and using data within a programmatic setting make it complementary to traditional epidemiology courses that some learners may have taken previously. Examples are drawn from a variety of countries, with particular attention to limited-resource settings and populations experiencing health disparities. While this course does not cover statistical programming or advanced analysis methods, it provides a conceptual foundation that may help learners who decide to seek out such coursework in the future.

Requirements: Course is designed for students in the GHDI program. Any other interested students must submit an instructor permission request.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 3: Essential Course

Global Health & Population 532 Section: 1

Introduction to Global Health Care Delivery (190446)

Joseph Rhatigan

Joia Mukherjee

2024 Summer (2.5 Credits) Schedule: MTWRF 1130 AM - 0100 PM

Instructor Permissions: None Enrollment Cap: 60

This course will engage students in analysis of case studies that describe interventions to improve health care delivery in resource-poor settings. Class room discussion of these case studies will help illuminate principles and frameworks for the design of efficient and effective global health interventions. Through a focus on HIV, tuberculosis, and other conditions affecting populations living in poverty, these cases will allow students to carefully consider the question of how epidemiology, pathophysiology, culture, economics, and politics inform the design of interventions.

Class Notes: Enrollment Requirements: Class restricted to students in the GHDI program. Any other interested students must submit an instructor permission request.

Requirements: Course is designed for students in the GHDI program. Any other interested students must submit an instructor permission request.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	Summer Session
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration

Global Health & Population 555 Section: 1

Management Practices in Health Care Delivery (190468)

Rebecca Weintraub

2024 Summer (1.25 Credits)		Schedule:	MTWRF 0945 AM - 1115 AM
Instructor Permissions:	None	Enrollment Cap:	50

Management Practices in Health Care Delivery provides a review of key strategy and management practices in health care delivery.

The course is designed to train current and future managers how to apply, test, and refine current frameworks in health care delivery. Students are challenged to see patterns, identify solutions, and apply strategic approaches to programs in which they work.

The course consists of three modules which engage multiple disciplines and draw on leading experts.
Module 1: Designing and Measuring Complex Delivery Systems
Module 2: Practices and Processes for Designing Adaptive Systems
Module 3: Planning for Delivery at Scale

The course highlights the array of relationships which characterize health care delivery and global health, including relationships between nations and industries, with patients, providers, and payers. The principles addressed in the course supplement and complement case studies discussed in GHP532: Introduction to Global Health Care Delivery.

Course Note: Students will need general understanding of current players in health systems, as well as a general understanding of the infrastructure needs to deliver products and services to populations.

Enrollment Requirements: Course is designed for students in the GHDI program. Any other interested students must submit an instructor permission request.

Class Notes:	Students will need general understanding of current players in health systems, as well as a general understanding of the infrastructure needs to deliver products and services to populations. Class is designed for students in the GHDI program. Any other interested students must submit an instructor permission request.
Requirements:	Course is designed for students in the GHDI program. Any other interested students must submit an instructor permission request.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	Summer Session
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter

HSPH Interdepartmental

Subject: Interdepartmental

Interdepartmental 543 Section: 1

Introduction to R (222115)

Louisa Smith

2024 Summer (1.25 Credits)		Schedule:	TWRF 0100 PM - 0400 PM
Instructor Permissions:	None	Enrollment Cap:	30

This course will provide a fast-paced introduction to data management and analysis in R. The lectures, exercises, and programming challenges will provide you with skills, tips, and tricks to make your data tasks easier. Topics include figures and tables, data cleaning, and regression models. You will gain comfort with R and exposure to best practices for reproducible research, and will come away from the course with a toolbox of code you can modify and reuse in your own research.

Class Notes: This class is on-campus and is only available to students in the MPH-EPI program.

Requirements: Class is restricted to MPH-EPI students.
Pre-requisites: ID 207 and ID 208

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Conditionally Approved	Conditionally Approved Course
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	MPH-EPI
HSPH: Course Category	Category 4: Elective

Interdepartmental 544 Section: 1

Writing Epidemiologic Research (222116)

Donald Halstead

2024 Summer (1.25 Credits)		Schedule:	MTWR 0100 PM - 0400 PM
Instructor Permissions:	None	Enrollment Cap:	20

Researchers are writers. Scientific research is not considered complete until it is written up and published, and writing is a major component of most researchers' jobs. Furthermore, the more you advance in your career, the more time you will spend in writing, and the more important it will be that you are able to effectively communicate with a wide range of audiences, including the public. Yet despite the centrality of writing to science, careers, raising research funding and communicating findings to advance knowledge and improve health, few researchers receive any formal writing instruction in their training.

The goal of this 4-session course is to strengthen your scientific writing skills by analyzing the arguments and narrative pathways embedded in the IMRAD format (Introduction, Methods, Results and Discussion), which is used to report most scientific research. Each 3-hour session will combine 1) lecture and discussion on core writing principles, and 2) application of these principles via constructive peer review of selected draft research manuscripts submitted by course members who want feedback on their work.

Class Notes: This is an on-campus course that is only available to MPH-EPI students.

Requirements: Class restricted to MPH-EPI students.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Conditionally Approved	Conditionally Approved Course
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective
HSPH: Program Affiliation	MPH-EPI

Interdepartmental 545 Section: 1

Cultivating Authentic Leadership (222117)

Anne Occhipinti

2024 Summer (1.25 Credits) Schedule: MTRF 0100 PM - 0400 PM

Instructor Permissions: None Enrollment Cap: 25

Self-awareness is essential on your path to authentic leadership. This course uses a variety of self assessment tools, readings, and discussions to help you understand work styles and preferences, strengths and goals, and how those factors contribute to the type of leader you want to be. It is increasingly important for people to have a clear idea of who they are and their purpose in life in order to navigate their work-life balance and become confident and inspiring leaders. Authenticity is about the true self; having clarity about and acting based on your deepest interests, values, and motivations – and most importantly, how we can all bring our authentic selves into all corners of our lives. You will apply what you have learned from the course in your personal development through in-depth self-exploration. You will also use peer coaching, to explore areas of growth, as well as to develop this important skill set. The course aims to promote skills for you to understand and develop authenticity in yourself and to cultivate authentic leadership.

Class Notes: This class is on-campus and only available to students enrolled in the MPH-EPI program.

Requirements: Class restricted to MPH-EPI students.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	MPH-EPI
HSPH: Conditionally Approved	Conditionally Approved Course
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration

Subject: Molecular Metabolism

Molecular Metabolism 300

Independent Study (190382)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Molecular Metabolism 300 Section: 002

Independent Study (190382)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 2: Required Course

Molecular Metabolism 300 Section: 003

Independent Study (190382)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Molecular Metabolism 300 Section: 004

Independent Study (190382)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 2: Required Course

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration

Subject: Women, Gender & Health

Women, Gender & Health 300

Independent Study (191282)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Women, Gender & Health 300 Section: 002

Independent Study (191282)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to

your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Course Category	Category 4: Elective
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300

Women, Gender & Health 300 Section: 003

Independent Study (191282)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt

Women, Gender & Health 300 Section: 004

Independent Study (191282)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of

faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Health Policy and Management

Subject: Health Policy & Management

Health Policy & Management 209 Section: 1

Economics for Health Policy (190527)

Anna Sinaiko

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 60

Students will learn how to analyze health policy issues through the application of basic economic principles. No previous economics training is required. The course will begin with an introduction to the U.S. health care system because we will be using examples drawn from the American context. The concepts we will be learning, however, are widely generalizable and students whose interests and experiences extend beyond the U.S. are welcomed. Students will learn how to conduct economic analyses of health policy problems and solutions. Among the topics we will discuss are health insurance coverage, physician payment, public reporting of quality information, health care price transparency, and health care consolidation.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 3: Essential Course
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	Summer Session

Health Policy & Management 253 Section: 1

Improvement in Quality of Health Care (190571)

Pedro Delgado Ghersi

Maureen Bisognano

Jafet Arrieta

2024 Summer (2.5 Credits)		Schedule:	MTWRF 0200 PM - 0330 PM
Instructor Permissions:	None	Enrollment Cap:	50

Improvement in Quality of Health Care is designed for practicing clinicians and those with an interest in health care management and quality improvement. This interactive and challenging course will provide students with a fresh perspective on improvement in health care systems, as well the necessary tools to create improvement in patient outcomes, enhance the care experience and advance equity in their own organizations and practices. Drawing on case examples from around the world and across care settings, topics of the sessions will include: the leadership of improvement; systems and process improvement; statistical thinking and the management of variation; psychology of change; innovation, design and creativity; collaborative work; closing equity gaps; patient-centeredness and co-production; the diffusion of innovations; integrating cost and quality; building will for change; and personal and professional development. Short readings and videos will be required between classes.

Restricted to HSPH degree or PCE students.

Class Notes: THIS CLASS HAS PRIORITY ENROLLMENT

Priority Wave Groups

Wave 1 | PCE Students & CLE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing

Wave 1 | 5/16/2024 11:00 AM - 5/26/2024 11:59 PM
Wave 2 | 5/27/2024 12:00 AM - 5/29/2024 11:59 PM
Wave 3 | 5/30/2024 12:00 AM - Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: Course Restricted: HSPH degree or PCE students. All other students can request instructor permission.

Additional Course Attributes:

Attribute	Value(s)
HSPH: SUM Limited Enrollment	HSPH: YES
HSPH: Program Affiliation	PCE

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 3: Essential Course

Health Policy & Management 260 Section: 1

Health Economics with Applications to Global Health Policy (203355)

Meredith Rosenthal

2024 Summer (2.5 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 99

Students will learn how to analyze current health policy issues through the application of basic economic principles. No previous economics training is required. The course will begin with an introduction to health economics. The concepts we will be learning are widely generalizable to both industrialized and developing country contexts and students are encouraged to learn from and teach each other about the different health systems of which participants have experience. Among the topics we will discuss are health insurance coverage, physician payment incentives, consumer decision making, and competition.

Diversity and inclusiveness are fundamental to public health education and practice. It is a requirement that you have an open mind and respect differences of all kinds. I share responsibility with you for creating a learning climate that is hospitable to all perspectives and cultures; please contact me if you have concerns or suggestions.

Class Notes: Enrollment Requirements: MPH-EPI, MPH-GEN, DRPH, and MPH-CLE Students Only
THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | MPH-EPI, MPH-GEN, DrPH
Wave 2 | MPH-EPI, MPH-GEN, DrPH
Wave 3 | MPH-EPI, MPH-GEN, DrPH, MPH-CLE

Priority Wave Timing
Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM
Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)
Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: MPH GEN, MPH-EPI, MPH-CLE, DRPH

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	MPH-EPI
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective

Health Policy & Management 284 Section: 1

Implementation Research in Health and Healthcare (204739)

Niteesh Choudhry

Joshua Metlay

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: Instructor Enrollment Cap: 55

The structure of the course is divided into two major sections: (1) idea generation, during which the theory of behavior change at the individual and organizational-level is applied to the understanding of evidence gaps in healthcare delivery to identify potential strategies for optimizing adoption of evidence-based practices, and (2) evaluation methods for assessing the impact of interventions to overcome evidence gaps and the factors that influence their success or failure. Specific tools in both qualitative and qualitative methods approaches will be emphasized, with the course faculty and invited guests providing specific examples from their own work.

Class Notes: THIS CLASS HAS PRIORITY ENROLLMENT

Priority Wave Groups

Wave 1 | PCE Students & CLE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing

Wave 1 | 5/16/2024 11:00 AM - 5/26/2024 11:59 PM

Wave 2 | 5/27/2024 12:00 AM - 5/29/2024 11:59 PM

Wave 3 | 5/30/2024 12:00 AM - Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: Course Restricted: HSPH degree or PCE students. All other students can request instructor permission.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	PCE

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective

Health Policy & Management 299 Section: 1

Research with Large Databases (190610)

Ellen McCarthy

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 50

Research with Large Databases (HPM299) provides an overview of existing data resources available to address research questions regarding clinical risk factors, treatment, outcomes and health policy. The course will cover a range of administrative, clinical, and survey databases commonly used in large database research, including the strengths and limitations of the different types of data. Special attention will be devoted to federal survey databases that are publicly available and readily usable by new investigators. Students will gain hands-on experience using SAS statistical software to obtain, create, manipulate, and analyze databases. Key statistical issues, including risk-adjustment and sampling weights, will be emphasized in the course. Students will evaluate published studies based on large databases, develop a proposal for analyzing a specific research question using one of the publicly available databases, and analyze the database as part pf a group project. Students will choose from databases provided in the course. Prior experience with SAS is not assumed or required. This course is taught in SAS only; Stata and R users are expected to learn SAS as part of this course.

Course Prerequisite(s): ID207 or [(BST201 or BST202&203 or BST206&207/8) and (EPI200 or EPI201 or EPI208 or EPI500 or EPI505)]. All prerequisites can be taken concurrently.
Preference is given to PCE degree students and then PCE non-degree students. PCE students will automatically be enrolled and non-degree students have priority in petition approvals

Class Notes:

Enrollment Requirements
ID207 or [(BST201 or BST202&203 or BST206&207/8) and (EPI200 or EPI201 or EPI208 or EPI500 or EPI505)]. All prerequisites can be taken concurrently.
Preference is given to PCE degree students and then PCE non-degree students. PCE students will automatically be enrolled and non-degree students have priority in petition approvals

THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | PCE Students & CLE Students
Wave 2 | Wave 1 + HSPH Degree Students
Wave 3 | Waves 1 and 2 + Approved Petitioners

Priority Wave Timing
Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM

Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: ID207 or [(BST201 or BST202&203 or BST206&207/8) and (EPI200 or EPI201 or EPI208 or EPI500 or EPI505)]. All prerequisites can be taken concurrently.
Course Restriction: HSPH degree or PCE students. All other students can request instructor permission.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: SUM Limited Enrollment	HSPH: YES
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	PCE

Health Policy & Management 300

Independent Study (190611)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration

Health Policy & Management 300 Section: 002

Independent Study (190611)

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
Course Evaluation	Course Evaluation Exempt
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective
HSPH: Independent Study	HSPH Independent Study 300

Health Policy & Management 300 Section: 003

Independent Study (190611)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Health Policy & Management 300 Section: 004

Independent Study (190611)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Independent Study	HSPH Independent Study 300

Health Policy & Management 512 Section: 1

Medical Informatics (190622)

David Bates

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 50

Medical Informatics and health information technology are increasingly critical for delivery of safe, effective health care, and also for research, management, and quality and safety improvement. Health information technology will likely transform health care in the coming years, and electronic health records represent a treasure trove of data for anyone interested in clinical effectiveness research, and a vehicle for improving healthcare delivery. In this course we describe the core issues in the field of medical informatics, survey the methods used to perform clinical effectiveness research using clinical systems, give examples of healthcare

improvement using health information technology, and describe how to evaluate clinical systems interventions. Major topics include: the impact of clinical systems with a focus on clinical decision support, evaluation methods, obtaining information from clinical systems, and the role of informatics standards. Issues such as confidentiality and privacy, organizational factors, and interoperability, will also be covered. The relevance of informatics in disease management, patient computing, and biosurveillance will also be highlighted. You do not need to be a programmer or to have medical informatics as a primary interest to take this course; it is targeted at those who want to do clinical research or care improvement.

Course Activities: Students will write a paper about a proposed analysis using data from a clinical information system.

Restricted to HSPH degree or PCE students.

Class Notes: THIS CLASS HAS PRIORITY ENROLLMENT

Priority Wave Groups

Wave 1 | PCE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing

Wave 1 | 5/16/2024 11:00 AM - 5/26/2024 11:59 PM

Wave 2 | 5/27/2024 12:00 AM - 5/29/2024 11:59 PM

Wave 3 | 5/30/2024 12:00 AM - Enrollment Deadline (varies by session)

Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements: Course Restricted: HSPH degree or PCE students. All other students can request instructor permission.

Additional Course Attributes:

Attribute	Value(s)
HSPH: SUM Limited Enrollment	HSPH: YES
HSPH: Course Category	Category 4: Elective
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	PCE
All: Cross Reg Availability	Not Available for Cross Registration

Health Policy & Management 549 Section: 1

Ethical and Regulatory Issues in Human Research (203971)

Delia Wolf Christiani

2024 Summer (2.5 Credits) Schedule: MTWRF 0930 AM - 1150 AM
TWRF 0930 AM - 1150 AM

Instructor Permissions: None Enrollment Cap: 50

This course introduces ethical and regulatory requirements for review, conduct, oversight and reporting of research involving humans. Topics include roles and responsibilities of Institutional Review Board (IRB), public health research ethics; regulations and guidelines governing investigational drugs and devices; financial and non-financial conflict of interest; research involving children, peer review, publication, and research misconduct. The course offers formal presentations/lectures, combined with classroom discussion of case studies covering a variety of topics. Students will also have the opportunity to obtain hands-on experiences such as participating in a mock IRB meeting.

Requirements: Restricted to students in the MPH-EPI program

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	MPH-EPI
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course

Health Policy & Management 549 Section: 2

Ethical and Regulatory Issues in Human Research (203971)

Delia Wolf Christiani

2024 Summer (2.5 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 4

This course introduces ethical and regulatory requirements for review, conduct, oversight and reporting of research involving humans. Topics include roles and responsibilities of Institutional Review Board (IRB), public health research ethics; regulations and guidelines governing investigational drugs and devices; financial and non-financial conflict of interest; research involving children, peer review, publication, and research misconduct. The course offers formal presentations/lectures, combined with classroom discussion of case studies covering a variety of topics. Students will also have the opportunity to obtain hands-on experiences such as participating in a mock IRB meeting.

Requirements: Restricted to students in the MPH-EPI program

Additional Course Attributes:

Attribute	Value(s)
HSPH: Program Affiliation	MPH-EPI
All: Cross Reg Availability	Not Available for Cross Registration

Health Policy & Management 576 Section: 1

Improvement by Design: Using the Sci. of Design, Test, and Spread to Innovate and Improve Healthcare (224679)

Asaf Bitton

Katherine Semrau

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 30

This course focuses on the practical application of human-centered design and implementation science methodologies to improve healthcare systems by defining and closing know-do gaps, which represent the difference between what we know should be done based on evidence and what takes place in practice. Over the four-module course, participants will select a know-do gap to address and design, prototype, and test a proposed solution (tool or evidence-based practice change) and a plan for scale and spread. This will culminate in a final project, which can be brought back to their home organization and put into action.

Requirements: HSPH: PW PCE

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 4: Elective
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Conditionally Approved	Conditionally Approved Course
HSPH: Program Affiliation	PCE

Subject: Health Care Management

Health Care Management 701 Section: 1

Organizational Behavior (190479)

Laurie Pascal

2024 Summer (2.5 Credits) Schedule: MTWRF 1045 AM - 1215 PM

Instructor Permissions: None Enrollment Cap: 32

This course explores the challenges and rewards of managing and leading in complex health care systems, with a focus on enhancing the leadership, motivational, structural, cultural, political and organizational change skills and capabilities needed to be effective. Students will apply their new learning to case analyses and personal work situations, culminating in the development of a change initiative proposal for their home institutions.

Course Restricted: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration
eForm Autosubmitter	Auto Submitter

Health Care Management 704 Section: 1

Managing Information in Health Care (190482)

Deborah DiSanzo Eldracher

2024 Summer (2.5 Credits) Schedule: MTWRF 0900 AM - 1030 AM

Instructor Permissions: None Enrollment Cap: 32

This course will expose clinical executives to the concepts and knowledge involved in making strategic use of information technology in health care organizations. Through case studies, guest lecturers, and curated articles, students will learn about the current state of health care information technology. The class will delve into data uses, generative artificial intelligence, machine learning, and neural networks. We will consider the implications and benefits of technology for systems, clinicians, and patients. The class will examine and debate how clinical leaders can make information technology work better for health care.
Course Restricted: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration

Health Care Management 707.1 Section: 1

Health Care Management Practicum (213391)

Linda Cyr

Henry Bernstein

Priti Lakhani

2024 Summer (0.5 Credits) Schedule: R 0315 PM - 0445 PM

Instructor Permissions: None Enrollment Cap: 32

The Practicum provides students with an opportunity to integrate and apply the knowledge and leadership skills gained throughout the MHCM program by completing a comprehensive, independent project of their own choosing during the academic year. Students' self-selected projects might entail transforming an existing situation within their existing organizations or developing a business plan for a completely new, innovative initiative. Students will propose a project, develop a project plan, and build the business case to win approval and implement the idea.

Course Restricted: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration

Attribute	Value(s)
HSPH:Year Long Course	HSPH:Year Long Course

Health Care Management 711.1 Section: 1

Quality Improvement and Quantitative Methods (190489)

Evan Benjamin

Catherine Kreatsoulas

Josko Silobrcic

2024 Summer (0.5 Credits) Schedule: MTWRF 0130 PM - 0300 PM

Instructor Permissions: None Enrollment Cap: 32

In today's dynamic and complex healthcare landscape, the ability to analyze, interpret, and leverage data for informed decision-making is crucial for achieving and sustaining high-quality patient outcomes. The curriculum is tailored to equip physician executives and managers with the knowledge and skills to lead and oversee quality management, patient safety and improvement initiatives in health organizations. Using selected readings, case studies, lecture presentations, and classroom discussions, students will apply principles of high-reliability quality improvement tools with quantitative analysis to identify opportunities for improvement, prioritize areas of focus, measure the impact of changes, and support data-driven decision-making to applied projects. Students will be expected to apply the learned concepts to plan and execute a quality improvement project in their own health organization for the complementary course, HCM 758 Field Project in Quality Improvement.
Course Restriction: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH:Year Long Course	HSPH:Year Long Course
HSPH: Course Category	Category 2: Required Course

Health Care Management 712 Section: 1

Transitioning to Physician Leadership (190490)

Ronald Goodspeed

Elizabeth Johnson

2024 Summer (2.5 Credits) Schedule: MTWRF 0315 PM - 0445 PM

Instructor Permissions: None Enrollment Cap: 32

HCM 712: Transitioning to Physician Leadership

This course focuses on the unique nature of physician leadership and the leadership and management methods and skills that are most practical and relevant to becoming a successful physician leader. Emphasis

is placed on the evolution/transition from physician to becoming a physician leader. Critical leadership skills are identified and defined. The practical application of leadership skills is examined. Effective execution of leadership skills is illustrated and emphasized. Methods of overcoming typical obstacles are discussed. Cases, mini-cases, articles, and discussions provide participants with insight into real-world examples of roles, challenges, successes and mistakes of those in leadership positions. A framework for leadership is introduced and successive sessions take selected elements of the framework for further study. Topics include; characteristics and skills of great leadership; current challenges, professionally and personally; operational challenges and opportunities; time management; leading from anywhere in the organization; an introduction to health care organization governance; the physician's role in health care organization governance; coaching and developing others, working with difficult people; influencing and persuading others; personal development; network development; and career management.

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 2: Required Course
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration

Health Care Management 722 Section: 1

Financial Management of Health Care Organizations (190493)

Carl Byers

2024 Summer (2.5 Credits) Schedule: MTWRF 1045 AM - 1215 PM

Instructor Permissions: None Enrollment Cap: 32

This course aims to help students gain a comprehensive understanding of the role of finance in healthcare organizations, building on students' learning about financial and managerial accounting. Topics include financial management of working capital and investment decision-making, capital structure, and mergers and acquisitions of health care organizations. In essence, this is a finance class tailored to the needs and circumstances of healthcare organizations. Topics include the time value of money, the relationship between risk and return, the cost of equity and debt capital, mergers and acquisitions, and evaluation of investment projects. Materials will primarily involve cases about a range of health care organizations (hospitals, insurers/ managed care plans, neighborhood health centers, physician groups, home health agencies, etc.). Work by students will include short assignments, case preparation, and an in-depth group project about a particular financing transaction for a hospital system. Guests will join the class for discussion about the implementation of core concepts in their organizations. The class meets once per week for extensive sessions that include a blend of these teaching topics and methods.

Course Restricted: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 2: Required Course

Health Care Management 732 Section: 1

Operations Management in Service Delivery Organizations (190495)

Joseph Pliskin

2024 Summer (2.5 Credits) Schedule: MTWRF 0900 AM - 1030 AM

Instructor Permissions: None Enrollment Cap: 32

Operations management is concerned with evaluating the performance of operating units, understanding why they perform as they do, designing new or improved operating procedures and systems for competitive advantage, making short-run and long-run decisions that affect operations, and managing the work force. To understand the role of operations in any organization, a manager must understand process analysis, capacity analysis, types of processes, productivity analysis, development and use of quality standards, and the role of operating strategy in corporate strategy. The course will also present the focused management approach which can help an organization achieve much more with existing resources. The course will demonstrate how operations management—in particular Lean and the Theory of Constraints (TOC)—can rapidly enhance value and performance in any health care organization. Utilizing a systems approach that will be relevant for health care managers and executives, it unpacks and demystifies concepts such as performance measures, operations, quality and value enhancement, all as they relate to eliminating waste and non-value-adding activities.

Course Note: Similar to HPM 232 - adapted for the non-residential program.

Course Restricted: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 2: Required Course
All: Cross Reg Availability	Not Available for Cross Registration

Health Care Management 758.1 Section: 1

Field Project in Quality Improvement (213394)

Josko Silobrcic

Catherine Kreatsoulas

Evan Benjamin

2024 Summer (0.5 Credits) Schedule: M 0315 PM - 0445 PM

Instructor Permissions: None Enrollment Cap: 32

This course will provide physician executives with pragmatic, applied, real-world insights into quality improvement (QI) in healthcare organizations, based on the application of proven strategic and tactical frameworks, methodologies and tools to their own quality-related field projects, performed during the 2nd academic year of the MHCM program. Throughout their efforts, from project conception, design and planning, to measurement, implementation, analysis and follow-up actions, the students are mentored and guided (individually and in small groups) by expert course faculty. The course follows and closely complements the HCM 711 (Quality Improvement and Quantitative Methods in Quality Management) summer/fall course, which provides the conceptual and methodological bases, analytic tools and practices for the field project. At the end of this course, students will be better prepared for and substantially proficient in their own roles in quality improvement and management, leading/supporting their organizations' efforts in those areas using sound, science-based and systematic, methodical and analytic approaches and processes.

Course Restricted: HCM students only

Class Notes: Class meeting dates and times communicated by the department.

Requirements: HSPH: HCM Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 2: Required Course
HSPH:Year Long Course	HSPH:Year Long Course
All: Cross Reg Availability	Not Available for Cross Registration

Subject: Decision Science

Decision Science 286 Section: 1

Decision Analysis in Clinical Research (191107)

Uwe Siebert

Eve Wittenberg

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 70

Decision Analysis in Clinical Research (RDS286) introduces students to the systematic methods of evidence-based decision analysis and cost-effectiveness analysis, and familiarizes students with their growing range of applications in clinical and public health decision making, clinical and comparative effectiveness research, economic evaluation and health technology assessment.

Topics of the sessions include: the use of causal trees/diagrams/estimands to express comparative efficacy and real-world effectiveness for clinical procedures and public health interventions; the principles of linked evidence and different model types; the use of sensitivity analysis to assess and express uncertainty; Bayes theorem and evaluation of diagnostic test strategies; utility theory and its use to integrate patient preferences in health outcomes; benefit-harm analysis and cost-effectiveness analysis for clinical research,

clinical guideline development, health technology assessment and health policy decision making. Lectures are accompanied by case problems, as well as optional group work breakout sessions, self-assessment quizzes, review sessions and computer exercises.

After this course, students will understand the uses, strengths, limitations and ethical issues of decision analysis and cost effectiveness in clinical decision making and research design. We will discuss case examples for prevention, treatment and disease management from different disease areas including cancer, cardiovascular disease, infectious disease, pandemic control, and others.

Requires prior knowledge of clinical medicine or related subjects (through training and/or clinical research experience) and strong quantitative ability/aptitude. Priority for enrollment will be given to students in the Program for Clinical Effectiveness (PCE).

Class Notes:

Course Requirements:
Pre-requisites: BST202 or BST206 (which may be taken concurrently) or BST201. Course restricted: HSPH Degree or PCE students. Any other interested students must request instructor permission to enroll in this course.

THIS CLASS HAS PRIORITY ENROLLMENT
Priority Wave Groups
Wave 1 | PCE Students & CLE Students
Wave 2 | HSPH Degree Students
Wave 3 | Approved Petitioners

Priority Wave Timing
Wave 1 | 5/16/2024 11:00AM – 5/26/2024 11:59PM
Wave 2 | 5/27/2024 12:00AM – 5/29/2024 11:59PM
Wave 3 | 5/30/2024 12:00AM – Enrollment Deadline (varies by session)
Any student who does not meet the Wave 1 or Wave 2 criteria can add themselves to the waitlist (if enrollment requirements are met) at any time during the enrollment period. At the beginning of each priority wave, students on the waitlist who meet the Wave's criteria will be automatically enrolled into any remaining seats in the course (pending no time conflicts)

Requirements:

Pre-requisites: BST202 or BST206 (which may be taken concurrently), or BST201.
Course restricted: HSPH Degree or PCE students.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 3: Essential Course
eForm Autosubmitter	Auto Submitter
HSPH: SUM Limited Enrollment	HSPH: YES
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Program Affiliation	PCE

Master of Public Health

Subject: Master of Public Health

Master of Public Health 101 Section: 1

Qualitative Methods for Public Health: A Brief Introduction (215930)

Emma-Louise Aveling

Jane Roberts

2024 Summer (0.25 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 100

This online module will provide a basic introduction to qualitative methods in public health research. It is intended for students with little or no prior knowledge of qualitative research methods, but who have an interest in using or conducting qualitative research to inform health policy and practice. The module will provide an overview of the qualitative research paradigm, including fundamental principles of the paradigm, potential uses of qualitative inquiry in addressing public health issues, the value, and utility of core data generation methods, and basic principles of qualitative data analysis.

Class Notes: Open only to students in MPH-EPI, MPH-GEN, MPH-CLE, and part-time MPH-45 Programs.

Please direct all questions about MPH 101 to Ying-Ju Lai, Educational Programs Project Manager, at ylai@hsph.harvard.edu.

This course is online and asynchronous, with set due dates for each module.

Requirements: HSPH: Course reserved for MPH students

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Conditionally Approved	Conditionally Approved Course
HSPH: Course Category	Category 1: School-Wide Core Requirement
eForm Autosubmitter	Auto Submitter

Master of Public Health 102 Section: 1

Health Systems (213633)

Meredith Rosenthal

Rifat Atun

2024 Summer (1.25 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 100

Health systems are the foundation of health care delivery and an essential component of the public health landscape. Health Systems is designed to provide MPH students with an understanding of the components of a health system and alternative ways of understanding its structure, functions, and effectiveness. Through exploring both global and U.S. health systems within a comparative framework, students will learn to analyze the different choices that countries make in providing health coverage and health care to their populations and the challenges and benefits that these choices entail. This is an introductory survey course that enables students to learn essential concepts in each topic area.

Class Notes: Open only to students in the MPH-Epi, MPH-Gen, MPH-CLE, and part-time MPH-45 Programs.

Please direct all questions about MPH 102 to Ying-Ju Lai, Educational Programs Project Manager, at ylai@hsph.harvard.edu

This course is online and asynchronous, with set due dates for each module.

Requirements: MPH Students Only

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 1: School-Wide Core Requirement
eForm Autosubmitter	Auto Submitter

Master of Public Health 103 Section: 1

Leadership and Communication (213632)

Ted Witherell

2024 Summer (1.25 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 100

The effective practice of public health in the 21st century requires working with interdisciplinary teams, communicating effectively with diverse audiences, and successfully leading and managing others to achieve better health outcomes for all populations. This course is designed to provide MPH students with an understanding of, and appreciation for, the fundamentals of leadership, management, and governance; cultural competence; and communicating with different audiences. Through case study analysis, experiential exercises, simulations, lectures, practitioner panels, and application activities and assignments, students will explore the opportunities and challenges of being in leadership positions and will develop important skills in negotiation and mediation, budgeting and resource management, systems thinking, and selecting and developing a variety of audience-appropriate communication strategies.

Class Notes: Open only to students in MPH-EPI, MPH-GEN, MPH-CLE, and part-time MPH-45 Programs.

Please direct all questions about this course to Ying-Ju Lai, Educational Programs Project Manager, at ylai@hsph.harvard.edu.

This course is online and asynchronous, with set deadlines for weekly

assignments and assessments.

Requirements: MPH Students Only

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 1: School-Wide Core Requirement

Master of Public Health 104 Section: 1

Social, Behavioral, and Structural Determinants of Health (213634)

Natalie Slopen

Miranda Mancusi

Monica Wang

2024 Summer (1.25 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: 100

Social, Behavioral, and Structural Determinants of Health aims to provide an introduction to the social determinants of health, examine how social determinants influence the health of individuals, communities, and populations, provide an overview of public health intervention and evaluation approaches, and introduce health advocacy. Faculty will offer foundational frameworks and theories, discuss relevant research, explore potential interventions to improve health status and health outcomes, and encourage participants to apply their learning to current US and international contexts and issues. In addition to weekly discussion boards and check-in quizzes to grapple with the weekly material, students will get to complete two written assignments centered around identifying and addressing a solution to a health disparity in their home community. After learning the basics of how to write a critical communication/advocacy format (i.e. an op-ed), students will author one as the final assignment for this course.

Class Notes: Open only to students in the MPH-GEN, MPH-EPI, MPH-CLE. and part-time MPH-45 programs.

Please direct all questions about MPH 104 to Ying-Ju Lai, Educational Programs Project Manager, at ylai@hsph.harvard.edu.

This course is online and asynchronous, with set deadlines for weekly assignments and assessments.

Requirements: MPH Students Only

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
HSPH: Course Category	Category 1: School-Wide Core Requirement
All: Cross Reg Availability	Not Available for Cross Registration

Master of Public Health 105 Section: 1

Public Health Policy and Politics (213635)

John McDonough

2024 Summer (1.25 Credits)		Schedule:	M 0845 AM - 1200 PM T 0845 AM - 1200 PM R 0845 AM - 1200 PM F 0845 AM - 1200 PM
Instructor Permissions:	None	Enrollment Cap:	60

The effective practice of public health in the 21st century demands familiarity with the dynamics of policy development. This includes policy development, enactment, implementation, evaluation, and revision, plus understanding political dynamics to achieve policy change and improvement. While this pursuit is lifelong, learning key foundational elements can quicken and broaden effective inquiry and engagement. This course will introduce MPH students to core and essential elements of policy and politics in the public health context, laying a foundation on which students can expand their familiarity and sophistication throughout their professional careers. Most of the sessions will include the use of a case study to illuminate and explore policy concepts and to familiarize students with public health policy areas.

Cases will be incorporate a global and/or domestic focus. Two core policy/political models will be consistent reference points in analyzing cases: first, John Kingdon's agenda-setting model (also known as the multiple streams model) and second, Mark Moore's strategic triangle (aka: public value) framework. To understand cases and core models, students will learn multiple dimensions of the policy process, including the roles of ethics, evidence, and equity. Students will engage in population-based policy design; evaluate policies to assess their impact on population health and health equity, and practice communication skills relating to public health content.

Class Notes: Enrollment Eligibility: MPH 105 in June is available only to students in the MPH-Epidemiology Program

Requirements: Class restricted to MPH-EPI students.

Additional Course Attributes:

Attribute	Value(s)
eForm Autosubmitter	Auto Submitter
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 1: School-Wide Core Requirement

Nutrition

Subject: Nutrition

Nutrition 217 Section: 1

Global Nutrition (190925)

Christopher Sudfeld

2024 Summer (2.5 Credits) Schedule: MTWRF 0200 PM - 0330 PM

Instructor Permissions: None Enrollment Cap: 30

Malnutrition is the leading cause of death and disability worldwide, and is a major impediment to population health and economic development. Under-nutrition has dominated the health profile of developing countries, within a vicious cycle of poverty, under-nutrition, and infectious diseases. However, economic development, urbanization, and associated changes in diet and lifestyle patterns have contributed to the rapid emergence of chronic health conditions in these regions, including obesity, diabetes mellitus, and cardiovascular disease.

The specific course objects are to enable students to:

- Understand the role of nutrition in health and human development in resource-poor and enveloped settings

- Apply the acquired knowledge in clinical care, field programs, and research

- Critically review scientific literature and program experience on nutrition in relation to prevention, care, and treatment and draw appropriate conclusions

- Use the knowledge obtained for a career in learning in nutrition

Requirements: Students outside of HSPH must request instructor permission to enroll in this course

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 3: Essential Course
eForm Autosubmitter	Auto Submitter
HSPH: Program Affiliation	Summer Session
All: Cross Reg Availability	Not Available for Cross Registration

Nutrition 300

Independent Study (190930)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Independent study work can include laboratory studies, projects in applied nutrition, library research, or the following special topic listed under NUT 301.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration

Nutrition 300 Section: 002

Independent Study (190930)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Independent study work can include laboratory studies, projects in applied nutrition, library research, or the following special topic listed under NUT 301.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Nutrition 300 Section: 003

Independent Study (190930)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Independent study work can include laboratory studies, projects in applied nutrition, library research, or the following special topic listed under NUT 301.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form,

which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
Course Evaluation	Course Evaluation Exempt
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration

---

Nutrition 300 Section: 004

Independent Study (190930)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of the regular courses. Independent study work can include laboratory studies, projects in applied nutrition, library research, or the following special topic listed under NUT 301.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration

Social and Behavioral Sciences

Subject: Social & Behavioral Sciences

Social & Behavioral Sciences 300

Independent Study (191142)

2024 Summer (0 Credits) Schedule: TBD

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
All: Cross Reg Availability	Not Available for Cross Registration

Social & Behavioral Sciences 300 Section: 002

Independent Study (191142)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
Course Evaluation	Course Evaluation Exempt
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed

Social & Behavioral Sciences 300 Section: 003

Independent Study (191142)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt

Social & Behavioral Sciences 300 Section: 004

Independent Study (191142)

2024 Summer (0 Credits) Schedule:

Instructor Permissions: None Enrollment Cap: n/a

An opportunity for independent study is offered for interested and qualified students or small groups of students. Arrangements must be made with individual faculty members and are limited by the amount of faculty time available. These programs are open to all students who wish to go beyond the content of regular courses.

Important Information: In order to enroll in an Independent Study course you must submit a proposal form, which will be reviewed by the department and faculty member. To do this, please click on the 'Submit Proposal' button, complete the form, and submit. If your proposal is approved, the course will be added to

your Crimson Cart and you will receive a notification email. You will need to go to your Crimson Cart and complete your enrollment into the class (enrollment in the course is not finalized until this step is taken).

Please note that the 'Submit Proposal' button will only be available while the Crimson Cart and the HSPH enrollment period is open.

Additional Course Attributes:

Attribute	Value(s)
HSPH: Independent Study	HSPH Independent Study 300
All: Cross Reg Availability	Not Available for Cross Registration
Course Evaluation	Course Evaluation Exempt
HSPH: Course Category	Category 4: Elective
ALL: Exclude from Canvas Feed	Exclude from Canvas Feed